

# IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Patent Application of  
WOOD et al.  
Serial No. 09/701,747  
Filed: January 29, 2001  
Title: ION CHANNELS



Atty Dkt. 620-123  
C# M#

Group Art Unit:

Examiner:

Date: June 27, 2001

Assistant Commissioner for Patents  
Washington, DC 20231

Sir:

## RESPONSE TO NOTIFICATION OF MISSING REQUIREMENTS

This is a response/amendment/letter in the above-identified application and includes an attachment which is hereby incorporated by reference and the signature below serves as the signature to the attachment in the absence of any other signature thereon.

### Fees are attached as calculated below:

Total effective claims after amendment	0	minus highest number	\$	0.00
previously paid for	20	(at least 20) =	0 x \$ 18.00	

Independent claims after amendment	0	minus highest number	\$	0.00
previously paid for	3	(at least 3) =	0 x \$ 80.00	

If proper multiple dependent claims now added for first time, add \$270.00 (ignore improper)

Petition is hereby made to extend the current due date so as to cover the filing date of this paper and attachment(s) (\$110.00/1 month; \$390.00/2 months; \$890.00/3 months)	\$	0.00
	\$	0.00

Terminal disclaimer enclosed, add \$ 110.00

<input type="checkbox"/> First/second submission after Final Rejection pursuant to 37 CFR 1.129(a) (\$710.00)	\$	0.00
<input type="checkbox"/> Please enter the previously unentered, filed		
<input type="checkbox"/> Submission attached		
<b>Subtotal</b>	\$	0.00

If "small entity," then enter half (1/2) of subtotal and subtract

☐ Applicant claims "small entity" status. ☐ Statement filed herewith

Rule 56 Information Disclosure Statement Filing Fee (\$180.00)	\$	0.00
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Assignment Recording Fee (\$40.00)		0.00
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Other:

**TOTAL FEE ENCLOSED \$ 0.00**

The Commissioner is hereby authorized to charge any deficiency in the fee(s) filed, or asserted to be filed, or which should have been filed herewith (or with any paper hereafter filed in this application by this firm) to our Account No. 14-1140. A duplicate copy of this sheet is attached.

1100 North Glebe Road, 8<sup>th</sup> Floor  
Arlington, Virginia 22201-4714  
Telephone: (703) 816-4000  
Facsimile: (703) 816-4100  
MJW:tat

NIXON & VANDERHYE P.C.  
By Atty: Mary J. Wilson, Reg. No. 32,955

Signature: \_\_\_\_\_

*Mary J. Wilson*



## UNITED STATES PATENT AND TRADEMARK OFFICE

Commissioner for Patents, Box PCT  
United States Patent and Trademark Office  
Washington, D.C. 20231  
www.uspto.gov

U.S. APPLICATION NO. 09/701747	FIRST NAMED APPLICANT DOCKETED + SEQ LISTING WOOD CLT/MATTER # 620-123 MAIL DATE 4/27/01 DUE DATE June 27, 2001 FINAL DEADLINE Nov 27, 2001 DOCKETED BY MR. [signature]	ATTY. DOCKET NO. 620-123
NIXON & VANDERHYE 8TH FLOOR 1100 NORTH GLEBE ROAD ARLINGTON, VA 22201		INTERNATIONAL APPLICATION NO. PCT/GB99/01743
		I.A. FILING DATE 03 JUN 99
		PRIORITY DATE 03 JUN 98

DATE MAILED: 27 APR 2001

### NOTIFICATION OF MISSING REQUIREMENTS UNDER 35 U.S.C. 371 IN THE UNITED STATES DESIGNATED/ELECTED OFFICE (DO/EO/US)

1. The following items have been submitted by the applicant or the IB to the United States Patent and Trademark Office as ☐ a Designated Office (37 CFR 1.494) ☒ an Elected Office (37 CFR 1.495):

- |  |   |
|--|---|
| <input checked="" type="checkbox"/> U.S. Basic National Fee.   | <input type="checkbox"/> Indication of Small Entity Status.                         |
| <input checked="" type="checkbox"/> Copy of the international application.   | <input type="checkbox"/> Translation of the international application into English. |
| <input type="checkbox"/> Oath or Declaration of inventor(s).   | <input type="checkbox"/> Translation of Article 19 amendments into English.         |
| <input type="checkbox"/> Copy of Article 19 amendments.  | <input type="checkbox"/> Other:   |
| <input type="checkbox"/> Priority Document.  |   |
| <input checked="" type="checkbox"/> The International Preliminary Examination Report in English and its Annexes, if any. |   |
| <input type="checkbox"/> Translation of Annexes to the International Preliminary Examination Report into English.        |   |

2. ☒ Applicant has requested early processing under 35 U.S.C. 371(f) but has not filed the following indicated items and/or the indicated items in paragraph 3 below. The Basic National Fee and the copy of the international application must be filed prior to 20 or 30 months from the priority date to avoid abandonment.

- ☐ U.S. Basic National Fee. ☐ Copy of the international application.

3. The following items **MUST** be furnished within the period set forth below in order to complete the requirements for acceptance under 35 U.S.C. 371:

- ☐ a. Translation of the application into English. A processing fee will be required if submitted later than the appropriate 20 or 30 months from the priority date.
- ☐ The current translation is defective for the reasons indicated on the attached Notice of Defective Translation.
- ☐ b. Processing fee for providing the translation of the application and/or the Annexes later than the appropriate 20 or 30 months from the priority date (37 CFR 1.492(f)).
- ☒ c. Oath or declaration of the inventors, in compliance with 37 CFR 1.497(a) and (b), properly identifying the application (preferably by the International application number and international filing date). A surcharge will be required if submitted later than the appropriate 20 or 30 months from the priority date.
- ☐ The current oath or declaration does not comply with 37 CFR 1.497(a) and (b) for the reasons indicated on the attached PCT/DO/EO/917.
- ☐ d. Surcharge for providing the oath or declaration later than the appropriate 20 or 30 months from the priority date (37 CFR 1.492(e)).

4. Additional claim fees of \$ \_\_\_\_\_ as a ☐ large entity ☐ small entity, including any required multiple dependent claim fee, are required. Applicant must submit the additional claim fees or cancel the additional claims for which fees are due (37 CFR 1.492(g)). See attached PTO-875.

5. ☒ Applicant has not submitted the required sequence listing pursuant to 37 CFR 1.821-1.825. See attached PCT/DO/EO/920.

**ALL OF THE ITEMS SET FORTH IN 3(a)-3(d), 4 AND 5 ABOVE MUST BE SUBMITTED WITHIN TWO (2) MONTHS FROM THE DATE OF THIS NOTICE OR BY 22 OR 32 MONTHS (where 37 CFR 1.495 applies) FROM THE PRIORITY DATE FOR THE APPLICATION, WHICHEVER IS LATER. FAILURE TO PROPERLY RESPOND WILL RESULT IN ABANDONMENT.**

The time period set above may be extended by filing a petition and fee for extension of time under the provisions of 37 CFR 1.136(a).

6. If box 3a or 3c is checked, a translation of the Annexes **MUST** be submitted no later than the time period set above or the Annexes will be cancelled. A processing fee will be required if submitted later than 20 or 30 months from the priority date.
7. ☐ The Article 19 amendments are cancelled since a translation was not provided by the appropriate 20 (37 CFR 1.494(d)) or 30 (37 CFR 1.495(d)) months from the priority date.

Applicant is reminded that any communication to the United States Patent and Trademark Office must be mailed to the address given in the heading and include the U.S. application no. shown above. (37 CFR 1.5)

**A copy of this notice *MUST* be returned with this response.**

Enclosed: ☐ PCT/DO/EO/917  
☐ PTO-875

☐ Notice of Defective Translation  
☒ PCT/DO/EO/920

John L. Anderson

Telephone: 703-308-9116

FORM PCT/DO/EO/905 (March 2001)

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Rec'd PCT/PTO 27 JUN 2001 #4

09/701747

In re PATENT APPLICATION OF

WOOD et al.

Atty. Ref.: 620-123

Serial No.: 09/701,747

Group Art Unit:

Filed: January 29, 2001

Examiner:

For: ION CHANNELS

\* \* \* \* \*

June 27, 2001

RESPONSE TO NOTIFICATION OF MISSING REQUIREMENTS

Hon. Commissioner of Patents  
and Trademarks  
Washington, DC 20231

Sir:

In response to the Notification of Missing Requirements dated April 27, 2001, attention is directed to the fact that the inventor's declaration was in fact filed on January 29, 2001. A copy of the papers filed January 29, 2001, is enclosed, together with a copy of the postcard receipt evidencing that filing.

Acknowledgement of receipt of the foregoing is requested.

Respectfully submitted,

NIXON & VANDERHYE, P.C.

By Mary J. Wilson  
Mary J. Wilson  
Reg. No. 32,955

MJW:tat

1100 North Glebe Road, 8<sup>th</sup> Floor  
Arlington, Virginia 22201-4714  
Telephone: (703) 816-4000  
Facsimile: (703) 816-4100

FORM PTO-1390 (REV 11-98)	U.S. DEPARTMENT OF COMMERCE PATENT AND TRADEMARK OFFICE	ATTORNEY'S DOCKET NUMBER <b>620-123</b>
<b>TRANSMITTAL LETTER TO THE UNITED STATES DESIGNATED/ELECTED OFFICE (DO/EO/US) CONCERNING A FILING UNDER 35 U.S.C. 371</b>		U.S. APPLICATION NO. (If known, see 37 C.F.R. 1.5) <b>09/701,747</b>
INTERNATIONAL APPLICATION NO. <b>PCT/GB99/01743</b>	INTERNATIONAL FILING DATE <b>3 June 1999</b>	PRIORITY DATE CLAIMED <b>3 June 1998</b>

TITLE OF INVENTION

**ION CHANNELS**

APPLICANT(S) FOR DO/EO/US

**WOOD et al.**

Applicant herewith submits to the United States Designated/Elected Office (DO/EO/US) the following items and other information:

1. ☐ This is a **FIRST** submission of items concerning a filing under 35 U.S.C. 371.
2. ☒ This is a **SECOND** or **SUBSEQUENT** submission of items concerning a filing under 35 U.S.C. 371.
3. ☒ This is an express request to begin national examination procedures (35 U.S.C. 371(f) at any time rather than delay examination until the expiration of the applicable time limit set in 35 U.S.C. 371(b) and PCT Articles 22 and 39(1).
4. ☒ A proper Demand for International Preliminary Examination was made by the 19<sup>th</sup> month from the earliest claimed priority date.
5. A copy of the International Application as filed (35 U.S.C. 371(c)(2)).
  - a. ☐ is transmitted herewith (required only if not transmitted by the International Bureau).
  - b. ☒ has been transmitted by the International Bureau.
  - c. ☐ is not required, as the application was filed in the United States Receiving Office (RO/US).
6. ☐ A translation of the International Application into English (35 U.S.C. 371(c)(2)).
7. ☒ Amendments to the claims of the International Application under PCT Article 19 (35 U.S.C. 371(c)(3)).
  - a. ☐ are transmitted herewith (required only if not transmitted by the International Bureau).
  - b. ☒ have been transmitted by the International Bureau.
  - c. ☐ have not been made; however, the time limit for making such amendments has **NOT** expired.
  - d. ☐ have not been made and will not be made.
8. ☐ A translation of the amendments to the claims under PCT Article 19 (U.S.C. 371(c)(3)).
9. ☒ An oath or declaration of the inventor(s) (35 U.S.C. 371(c)(4)).
10. ☐ A translation of the annexes to the International Preliminary Examination Report under PCT Article 36 (35 U.S.C. 371(c)(5)).

**Items 11. To 16. Below concern document(s) or information included:**

11. ☐ An Information Disclosure Statement under 37 C.F.R. 1.97 and 1.98.
  12. ☐ An assignment document for recording. A separate cover sheet in compliance with 37 C.F.R. 3.28 and 3.31 is included.
  13. ☐ A FIRST preliminary amendment.  
☐ A SECOND or SUBSEQUENT preliminary amendment.
  14. ☐ A substitute specification.
  15. ☐ A change of power of attorney and/or address letter.
  16. ☐ Other items or information.
- ☐ This application is entitled to "Small entity" status. ☐ "Small entity" statement attached.

U.S. APPLICATION NO. (If known, see 37 C.F.R. 1.5) <b>09/701,747</b>		INTERNATIONAL APPLICATION NO. <b>PCT/GB99/01743</b>		ATTORNEY'S DOCKET NUMBER <b>620-123</b>																	
				<b>CALCULATIONS PTO USE ONLY</b>																	
17. <input checked="" type="checkbox"/> The following fees are submitted: <b>BASIC NATIONAL FEE (37 C.F.R. 1.492(a)(1)-(5)):</b> -- Neither international preliminary examination fee (37 C.F.R. 1.482) nor international search fee (37 C.F.R. 1.445(a)(2)) paid to USPTO and International Search Report not prepared by the EPO or JPO .....\$1000.00 -- International preliminary examination fee (37 C.F.R. 1.482) not paid to USPTO but International Search Report prepared by the EPO or JPO .....\$860.00 -- International preliminary examination fee (37 C.F.R. 1.482) not paid to USPTO but international search fee (37 C.F.R. 1.445(a)(2)) paid to USPTO .....\$710.00 -- International preliminary examination fee paid to USPTO (37 C.F.R. 1.482) but all claims did not satisfy provisions of PCT Article 33(1)-(4) .....\$690.00 -- International preliminary examination fee paid to USPTO (37 C.F.R. 1.482) and all claims satisfied provisions of PCT Article 33(1)-(4) .....\$100.00 <div style="text-align: right; margin-top: 10px;"><b>ENTER APPROPRIATE BASIC FEE AMOUNT =</b></div>																					
Surcharge of \$130.00 for furnishing the oath or declaration later than <input type="checkbox"/> 20 <input type="checkbox"/> 30 months from the earliest claimed priority date (37 C.F.R. 1.492(e)).				\$	0.00																
<table border="1" style="width:100%; border-collapse: collapse;"> <thead> <tr> <th style="width:20%;">CLAIMS</th> <th style="width:20%;">NUMBER FILED</th> <th style="width:20%;">NUMBER EXTRA</th> <th style="width:20%;">RATE</th> </tr> </thead> <tbody> <tr> <td>Total Claims</td> <td>53</td> <td>-53 = 0</td> <td>X \$18.00</td> </tr> <tr> <td>Independent Claims</td> <td>5</td> <td>-5 = 0</td> <td>X \$80.00</td> </tr> <tr> <td colspan="3"></td> <td style="text-align: right;">\$270.00</td> </tr> </tbody> </table>				CLAIMS	NUMBER FILED	NUMBER EXTRA	RATE	Total Claims	53	-53 = 0	X \$18.00	Independent Claims	5	-5 = 0	X \$80.00				\$270.00	\$	0.00
CLAIMS	NUMBER FILED	NUMBER EXTRA	RATE																		
Total Claims	53	-53 = 0	X \$18.00																		
Independent Claims	5	-5 = 0	X \$80.00																		
			\$270.00																		
MULTIPLE DEPENDENT CLAIMS(S) (if applicable)				\$	0.00																
<b>TOTAL OF ABOVE CALCULATIONS =</b>				\$	0.00																
Reduction by 1/2 for filing by small entity, if applicable. Small entity status must also be asserted. (Note 37 C.F.R. 1.9, 1.27, 1.28).				\$	0.00																
<b>SUBTOTAL =</b>				\$	0.00																
Processing fee of \$130.00, for furnishing the English Translation later than <input type="checkbox"/> 20 <input type="checkbox"/> 30 months from the earliest claimed priority date (37 C.F.R. 1.492(f)).				\$	0.00																
<b>TOTAL NATIONAL FEE =</b>				\$	0.00																
Fee for recording the enclosed assignment (37 C.F.R. 1.21(h)). The assignment must be accompanied by an appropriate cover sheet (37 C.F.R. 3.28, 3.31). \$40.00 per property				\$	0.00																
Fee for Petition to Revive Unintentionally Abandoned Application (\$1240.00 - Small Entity = \$620.00)				\$	0.00																
<b>TOTAL FEES ENCLOSED =</b>				\$	0.00																
				Amount to be:																	
				refunded	\$																
				Charged	\$																

a. ☒ A check in the amount of \$0.00 to cover the above fees is enclosed.

b. ☐ Please charge my Deposit Account No. 14-1140 in the amount of \$\_\_\_\_\_ to cover the above fees. A duplicate copy of this form is enclosed.

c. ☒ The Commissioner is hereby authorized to charge any additional fees which may be required, or credit any overpayment to Deposit Account No. 14-1140. A duplicate copy of this form is enclosed.

d. ☐ The entire content of the foreign application(s), referred to in this application is/are hereby incorporated by reference in this application.

**NOTE:** Where an appropriate time limit under 37 C.F.R. 1.494 or 1.495 has not been met, a petition to revive (37 C.F.R. 1.137(a) or (b)) must be filed and granted to restore the application to pending status.

**SEND ALL CORRESPONDENCE TO:**

NIXON & VANDERHYE P.C.  
 1100 North Glebe Road, 8<sup>th</sup> Floor  
 Arlington, Virginia 22201  
 Telephone: (703) 816-4000

*Mary J. Wilson*

SIGNATURE

**Mary J. Wilson**

NAME

**32,955**

REGISTRATION NUMBER

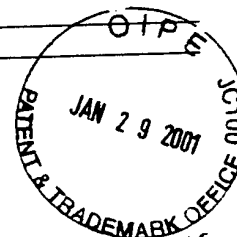
**January 29, 2001**

Date

Serial No.: 09/701,747  
Applicant: WOOD et al  
Title: ION CHANNELS

Atty: MJW  
Date: 1-29-2001  
Client: MEWBURN  
Ref: 620-123

\_\_\_\_ Amendment  
\_\_\_\_ Pages Specification  
\_\_\_\_ Claims  
\_\_\_\_ Sheets Drawings: Formal \_\_\_\_\_  
\_\_\_\_ Informal \_\_\_\_\_  
✓ Declaration (2 Pages)  
\_\_\_\_ Assignment  
\_\_\_\_ Priority Document  
\_\_\_\_ Base Issue Fee Transmittal  
\_\_\_\_ Fee (Check)



Other: TRANSMITTAL LETTER FILING COMPLETION